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**THE GLOBAL ECONOMIC AND FINANCIAL CRISIS
A REVIEW AND COMMENTARY**

Centre for Business Research, University of Cambridge
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Abstract

This paper provides a review and commentary on the current financial and economic crisis. It considers important analytical and policy issues from a global and North-South perspective. The analytical questions cover issues such as the better than expected performance of the world economy, the role of global financial imbalances, and whether or not economic theory has been helpful. It is argued that close international cooperation and policy coordination are essential to recovery and an improved distribution of the fruits of growth. Cooperation and financial regulation are particularly necessary in order to prevent international contagion and cascading sovereign debt defaults.

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1. Introduction

It is generally accepted that the acute phase of the current global financial and economic crisis started in September 2008, with the demise of Lehman Brothers, a leading US investment bank. Eighteen months later, this paper reflects on many of the following issues:

- Why the world economy has performed so much better than most analysts had expected when the crisis began.
- Which economic theories, if any, have been helpful in explaining the course of the crisis to date.
- To what extent, if any, were regulatory deficits in the field of finance and global financial imbalances responsible for the crisis?
- How should the world's financial system be organized so as to secure maximum sustainable and equitable growth for the real world economy?
- The question of government debt and of the danger of inflation.
- Other salient policy issues that have come to the fore, including that of the drawing down of sovereign debt.

In the context of the continuing global economic and financial crisis, the economic significance of the above issues is self-evident. However, not all the above questions can be treated satisfactorily in a single paper, hence only a relatively few issues will be examined in detail.

2. Economic and Financial Crisis and the Global Economy

The causes (both short- and longer-term) of the current global economic and financial crisis have been discussed in a number of contributions, including Aiginger (2009), Eichengreen and O'Rourke (October 2008), IMF (2008, 2009, 2010), Krugman (2008, 2009, 2010), Ormerod (2010), Solow (2009), UNCTAD (2008, 2009, 2010), UNDESA (2010), the US Council of Economic Advisers (2010).

It is generally agreed that difficulties associated with the housing segment of the US house property market were the immediate cause of the crisis (see, for example, IMF, 2008a). Complex financial instruments that incorporated sub-prime house mortgages lost their value as the housing bubble burst following ten years of continuous price rises based on expectations of a continuation of such increases. This housing bubble occurred despite the fact that during the previous two decades the supply of housing had increased appreciably (Solow, 2009). In brief, house prices had risen because interest rates were low and credit

was easily available, and prices were expected to continue to increase, much as in the case of the classic tulip mania and bubble in the early 17th century when, at its peak, the price of a tulip bulb Holland was equivalent to that of a three-story town house.

Housing bubbles have occurred many times before in American economic history without leading to an acute economic and financial crisis, let alone in the rest of the world. This episode was different in that it was accompanied by a bubble in US share and other asset prices. Moreover, the bursting of the US housing bubble led to a fall in share prices not only in the U.S. but also around the world. This was due to the much closer integration of world stock markets resulting from the financial globalization that had occurred in the previous two decades. It is interesting to note that bank losses due to the failure in the sub-prime mortgages market are estimated to have been around US\$250 billion. The consequent financial crisis led to a sharp fall in aggregate world stock market capitalization of the order of US\$26 trillion in one year – nearly one hundred times larger than the losses associated with sub-prime mortgages.¹ Robert Solow (2009) notes that the combined result of the housing and stock market shocks was a fall in US household wealth from US\$64.4 trillion in mid-2007 (before the crisis) to US\$51.5 trillion at the end of 2008. Thus 13 trillion dollars of household wealth disappeared in the space of about one year. As Solow (2009) rightly observes:

Nothing concrete had changed. Buildings still stood; factories were still capable of functioning; people had not lost their ability to work or their skills or their knowledge of technology. But a population that thought in 2007 that they had 64.4 trillion dollars with which to plan their lives discovered in 2008 that they have lost 20 per cent of that.

Many economists date the acute phase of the present crisis to the bankruptcy of Lehman Brothers USA in September 2008. Whether or not the collapse of this important financial institution was the root cause of the crisis, it certainly provided the trigger. In a comparison of the crisis of the 1930s and that beginning in 2008, Christina Romer, currently Chair of the US Council of Economic Advisers, observes ‘In 2008, the U.S. financial system had similarly survived the initial declines in house and stock prices...but the outright failure of Lehman Brothers proved too much for the system. As has been described by many others, the breakdown in funding relationships in the week following Lehman’s collapse was almost unfathomable. The financial system truly froze’ (Romer, 2010: 3).

3. Short and Long Term Causes of the Crisis

In addition to the literature on the failure of the sub-prime mortgage market, there is by now a relatively large literature on the other short-term as well as long-term ‘causes’ of the current economic and financial crisis. It is too near the events to expect a consensus to emerge on the causes of the crisis except perhaps on the observation that it had multiple causes. The diverse contributions on this topic have been succinctly and most helpfully summarized by Aiginger (2009, Table 1). For reasons of space only some of the causes listed in Table 1 are discussed in the following sections.

Table 1: A Summary Table of the Causes of the Economic and Financial Crisis

Causes	Economic and Financial Crisis
Trigger	Unsecured loans to US home owners Politically welcomed, cleverly sold Bundled, rated and passed on
Regulation Failures	Underestimation of risks and belief in self regulation Overwhelmed by innovations and internationalization Pro cyclical effects were supported by rules (mark to market valuation, Basel 2) Oligopoly structure of credit rating agencies, incompatibilities, stock market listing Neglect of cumulative systemic risks Insufficient regulation of the derivative market, SPVs, Hedge funds
Inflated Expectations of Returns:	Heterogeneity of profits across to countries/businesses, activities New form of equity substitutes Leveraging of banks, firms and consumers
Imprudent in incentive systems/risk management:	Bonus for short term success, stock options Over leveraging and hybrid capital Illusion about the benefits of mergers and firm size (market wide oligopolies) Speculation as an attractive career Higher earnings in financial capital relative to real capital Risk free promises from advisors, pension funds in mathematical models
Macro-economic imbalances:	Savings surplus of the emerging Asian countries, oil producers Triple deficit in the USA: trade budget and savings Insufficient reduction in money supply after the recovery in 2002 Reinvestment of rent seeking capital in the USA
Aggravating factors:	Bubbles in currency, raw material, oil and foods stuffs Specialized plus just-in-time relationships with purchasers/subcontractors Short-term view regarding profits, accounting rules and analysts’ reports Shortage of raw materials, energy, food stuffs Unequal income and wealth distribution Provision of loans and then selling them on (‘originate to distribute’)
Weakness in coordination	IMF, Work bank, G7, competition policy, tax havens Underestimation of systemic risks

Source: Aiginger (2009)

3.1 Deficits in Regulation

It is widely agreed that a major long-term factor in the making of the crisis was the lack of government regulation, both national and international, of financial institutions in the US and worldwide. In turn, this regulatory deficit appears to have arisen from an ideological faith in the virtues of the free market. It was believed not only that the market was always efficient but that it was also self-correcting (see further Ormerod, 2010). Alan Greenspan, the former Chairman of the Federal Reserve, in his 2009 testimony to a US Congressional Committee, stated that regulation was considered a negative factor for financial innovation, growth and prosperity (Greenspan, 2009a). The net result of this mindset was the evolution of a largely unregulated parallel banking system performing the functions of banks but without being subject to banking regulations (Krugman, 2008).

However, in his most recent testimony before the US Congress, Alan Greenspan (Greenspan 2009b) has spiritedly defended himself against the dual charge that he was responsible for the housing bubble due to his low interest rate policy and for not puncturing the bubble before it reached a level that would cause serious systemic difficulties. Greenspan suggested that his critics had short memories as many of them had earlier applauded sub-prime mortgages as being of tremendous benefit to low-income Americans. Furthermore, he suggested that at the time many people would have questioned whether there was indeed a housing bubble and asked how, in any case, the Federal Reserve would know the answer to this question better than the market.

Robust responses to Greenspan's arguments have been made by James Galbraith (2010), Paul Krugman (2010) and Robert Solow (2009), among others. They suggest that the securitization of sub-prime mortgages through their marketing as a combined financial product was little understood by the market. This, together with complex credit default swaps, as well as several other financial innovations, could be regarded as a fraudulent practice that should have been tightly regulated. Krugman (2010) suggests that, had the wide-ranging reforms currently under discussion in the US Congress been in place earlier, 'a handful of lavishly-paid leaders of the financial industry would not have been able to mislead and exploit consumers and investors.'

3.2 World Financial Imbalances

Apart from the above question of regulatory deficits with respect to the functioning of financial markets, many economists believe that the huge global imbalances in the current accounts of nation states contributed to financial

fragility and crisis. The latter arises because if deficits cannot be financed, this could result in disorderly and unwanted currency devaluations. Fear of such events may lead to widespread turbulence in financial markets and national economies.

In 2004, the US current account deficit amounted to \$666 billion dollars, comprising 69 per cent of the total deficit of countries running negative current account balances that year (Table 2). This compares with a current account deficit of US\$ 413.5 in 2000, which accounted for 62.2 per cent of total deficits. In the last quarter of 2005 (using a figure not in Table 2) the US deficit was estimated to be around \$700 billion dollars, 7 per cent of US GDP. Thus before the crisis, an already high US deficit was getting bigger, which, on the face of it, was not a healthy development. Nevertheless, an essential point is that the markets seemed to have accepted the situation as indicated by the relative stability of exchange rates of the main currencies (see Cooper (2005), Summers (2006)).²

Table 2: Current Account Balances, selected economies, 2000-04

Year		2000	2002	2004	2000	2002	2004
Economies		(\$ Billion)			(As a percentage of total surplus or deficit)		
Surplus economies	Japan	119.6	112.6	171.8	23.8	21.1	19.3
	Germany	-25.7	43.1	96.4	3.9	8.4	10.0
	China	20.5	35.4	70.0	4.1	6.9	7.9
	Russian Federation	44.6	30.9	59.6	8.9	6.0	6.7
	Saudi Arabia	14.3	11.9	49.3	2.9	2.3	5.5
Deficit Economies	United States	-413.5	-473.9	-665.9	62.2	72.5	69.0
	Spain	-19.4	-15.9	-49.2	2.9	2.4	5.1
	United Kingdom	-36.5	-26.4	-47.0	5.5	4.0	4.9
	Australia	-15.3	-16.6	-39.4	2.3	2.5	4.1
	Italy	-5.8	-6.7	-24.8	0.9	1.0	2.6

Source: Reproduced from Singh, 2007

An RIS (Research and Information System for Developing Countries) 2008 policy brief provides a stark outline of the evolution of the US international and national financial situation, as follows. In the period 1970-91, the cumulative current account deficit of the US was US\$ 881.5 billion, increasing to US\$ 1,569.3 billion during 1992-2000 and in the period 2001-2006 it reached US\$ 3,572.5 billion, with a deficit of US\$ 811.5 billion in 2006 alone. In recent years, China's foreign exchange surpluses have financed the growing US current account deficits at low interest rates.³

It is important to note, however, that China is not the main, let alone the only, economy to run a large current account surplus. In 2004, before the global financial and economic crisis, China's current account surplus of US\$ 70 billion accounted for less than 8 per cent of the total surpluses of countries with a positive current account balance (Table 2). Table 2 also suggests that in 2004 China's surplus was considerably smaller than that of either Germany or Japan, particularly the latter.

Other RIS data also indicate that the US has been living 'beyond its means' both at the household and government levels, stretching their respective budget constraints. Household savings that had been about 10 per cent of GDP in 1980 and 7 per cent in 1990 were only 0.4 per cent in 2007. The Federal budget, which had a surplus of US\$ 236.2 billion in 2000, recorded a deficit of US\$ 400 billion in the 2008 financial year. Mortgage debt ballooned from US\$3.8 trillion in 1980 to US\$14.4 trillion in the third quarter of 2007 and consumer credit increased from US\$0.35 trillion in 1980 to US\$2.5 trillion in 2007. By financing the recurring current account deficits through borrowing from abroad, the US became a net debtor to the outside world, with the net investment position showing a negative balance of US\$2.5 trillion in 2006.

The US has been both living beyond its means and yet growing faster than other advanced industrial countries such as Germany and Japan who are living within their means. Paradoxically, therefore, the international financial system appears to favour profligacy rather than thrift. Further, capital has been flowing from developing to developed countries (from China to the US, for example) that is, in a direction contrary to that which might be deemed appropriate from a development perspective.

Even those who do not regard global imbalances (particularly those of China and the US) to be the root cause of the crisis acknowledge that re-balancing is required, principally involving the elimination of high long-term deficits (as in the US) and persistent high surpluses (as in China). In policy terms this means

having a zero current account deficit at the desired rate of growth of GDP that would achieve full employment.

In the case of the US, over the four-year period 2007-2010, the current account deficit declined from 5.2 per cent of GDP in 2007 to 2.2 per cent in 2010 (IMF, 2009a and 2009b). This reduction was the result of the compression of economic activity during the recession and the deficit may well grow again as economic growth resumes.

China's surplus, on the other hand, has remained more or less constant over the four-year period 2007-2010, amounting to 11 per cent of GDP in 2007 and an average of 8 per cent over the next three years (UNDESA, 2010). Its optimal surplus would be that which corresponded to the full employment level of the economy and desired growth of real wages. In both the case of the US and China, this rebalancing may require considerable change in economic structure: in the former a greater emphasis on exports and a lower level of consumption and imports; in the latter a lower level of exports and greater reliance on domestic consumption and increased imports.

Such rebalancing is likely to affect all countries, whether or not they have contributed significantly to the global imbalances. In order to rebalance the world economy fully and reduce persistent surpluses and chronic deficits, it is necessary to consider also the cases of Japan and Germany (Akyuz, 2010). These two countries have also been running large trade surpluses with the US, although they have been considerably smaller than those of China. China's overall exports surplus with all countries is not very large, but it is disproportionately large with the US.

Apart from the trade and current account imbalances, there is another major imbalance in the global economy that requires urgent resolution. This concerns the distribution of both personal and functional income and their implications for aggregate consumption and aggregate demand. Under globalization, the power of workers in most advanced countries has been sharply reduced while that of capital has increased due largely to the free movement of capital. As a consequence, real wage growth has been lower than productivity growth. This process threatens to result in global under-consumption which, other things being equal, will reduce both growth and employment.

To conclude, there is a need to redress imbalances between consumption and investment in major economies. However, it must be noted that, despite a longstanding and growing US current account deficit, there was no crisis in the sense of a disorderly devaluation of the dollar. This leads some to reject the

notion of financial imbalances as being a major cause of the crisis, pointing to the fact that there was no run on the dollar. Opponents of this view suggest that the crisis that emerged in 2008 was due to uncontrolled US deficits. They further allege that the US took advantage of the dollar being the world's only reserve currency such that its current account deficits went unchecked.

4. Why Has The World Economy Performed Better Than Expected?

Christina Romer (Romer 2009) argues that the shocks that hit the US economy in the autumn of 2008 were at least as large as those experienced in 1929. A salient shock in both crises was the fall in household wealth: this fell by 17 per cent between December 2007 and December 2008 in the US. This was more than five times the decrease in 1929.

An important negative feature of the current crisis compared with that of the 1930s is the role and nature of banks and the collapse of inter-bank relations and that of trade credit for big and small businesses. Banks have refused to lend to other banks or to non-bank financial institutions. Similarly asset price volatility in the US has been greater in the current crisis than in the past. A great deal of research indicates that such volatility has an adverse effect on the level of investment. Notwithstanding these negative factors, the actual outcomes during the current crisis have fortunately so far been more benign.

During the Great Depression of the 1930's, the largest fall in the US GDP in a twelve-month period was of the order of 30 per cent. Employment in that 12-month period went down by 25 per cent. The depressed state of the economy continued until the beginning of the Second World War (Romer, 2009).

In the current downturn, falls in GDP in US, Europe and the world economy have been of a much lower order than during the depression years. Although the numbers of unemployed, underemployed and discouraged workers have increased during the current crisis, the rise has been far less than during the 1930s depression.⁴

In 2009, for the first time in 50 years, world GDP shrank, but only by two per cent, and was expected to return to positive growth in 2010 (UNDESA, 2009). Whether or not this growth is sustained and leads to resumption of the previous growth path is as yet an open question. It will depend on a number of factors including the debt and solvency crises in Greece, Spain, and Ireland. Although the decline in GDP for individual advanced countries has been greater than that for the world as a whole, none of these have reached the proportions of the 1930s depression. The maximum reduction in GDP growth in 2009 in advanced

countries has ranged between two per cent and six per cent. Furthermore, IMF data and projections indicate that most countries will have positive growth by the year 2010.

What explains the seeming ability of the world economy to avert a depression as serious as that in the 1930s? Evidence and analysis suggest three main reasons. The first is the outstanding record of India, China and other emerging countries both before and during the crisis. As Wolf (2008) suggests: ‘emerging economies had been an engine of growth for the past five years. China accounted for a quarter, Brazil Russia and India for another quarter, and all emerging and developing countries together for about two thirds’ (these calculations measure growth in PPP exchange rates). Despite the crisis these countries, particularly India and China, have been able to continue on their fast long-term growth path. They may therefore be expected to remain as long-term positive factors in the evolution of the world economy: fast growth in these countries helps the US and other economies by maintaining high levels of world demand.

The second major factor explaining the relatively good performance of the world economy during the present downturn has been the unexpected and welcome degree of cooperation between countries, symbolized by their adoption of coordinated global measures through the creation of the G20. This grouping includes all leading advanced countries and a number of emerging nations that together constitute about 85 per cent of world production and about two thirds of the world population. In 2009 the G20 agreed to a huge international stimulus even when many of them already had fiscal deficits. It was also agreed to cut interest rates and to strengthen the IMF and World Bank in order to help developing countries. This high degree of cooperation stands in striking contrast to the lack of cooperation and beggar-thy-neighbor policies that characterized nation states’ behaviour in the 1930s.⁵

As mentioned above, a striking feature of the response to the current crisis has been an aggregate coordinated fiscal stimulus amounting in 2008-2009 to an enormous 2.6 billion US dollars, equivalent to 3.4 per cent of world GDP⁶ (see Table 3). As a proportion of their GDP, developing countries in general have had a greater stimulus than developed countries.

Table 3: Fiscal stimulus to address the global financial and economic crisis

	<i>Share of GDP (percentage)</i>	<i>Fiscal stimulus (billions of US dollars)</i>		<i>Share of GDP (percentage)</i>	<i>Fiscal stimulus (billions of US dollars)</i>
Argentina	1.2	3.9	Luxembourg	3.6	2.0
Australia	4.7	47.0	Malaysia	5.5	12.1
Austria	4.5	18.8	Mexico	2.1	22.7
Bangladesh	0.6	0.5	Netherlands	1.0	8.4
Belgium	1.0	4.9	New Zealand	4.2	5.4
Brazil	0.2	3.6	Nigeria	0.7	1.6
Canada	2.8	42.2	Norway	0.6	2.9
Chile	2.4	4.0	Peru	2.6	3.3
China	13.3	585.3	Philippines	4.1	7.0
Czech Republic	1.8	3.9	Poland	2.0	10.6
Denmark	2.5	8.7	Portugal	1.2	3.0
Egypt	1.7	2.7	Russian Federation	1.2	20.0
Finland	3.5	9.5	Saudi Arabia	12.5	60.0
France	1.3	36.2	Singapore	5.8	10.6
Georgia	10.3	1.3	Slovenia	1.0	0.5
Germany	2.2	80.5	South Africa	1.5	4.2
Honduras	10.6	1.5	Spain	0.9	15.3
Hong Kong SAR ^b	5.2	11.3	Sri Lanka	0.2	0.1
Hungary	10.9	17.0	Sweden	2.8	13.4
India	3.2	38.4	Switzerland	0.5	2.5
Indonesia	1.4	7.1	Taiwan Province of China	3.9	15.3
Israel	1.4	2.8	Thailand	14.3	39.0
Italy	0.7	16.8	Turkey	5.2	38.0
Japan	6.0	297.5	United Kingdom	1.4	38.0
Kazakhstan	13.8	18.2	United Republic of Tanzania	6.4	1.3
Kenya	0.9	0.3	United States	6.8	969.0
Korea, Republic of	5.6	53.4	Viet Nam	9.4	8.4
Lithuania	1.9	0.9			
			All 55 economies	4.7	2,633
			World	4.3	

Source: UN/DESA, based on information from various sources. Note that the definition and contents of the policy measures vary from country to country and that the size of the packages may not be fully comparable across countries.

a This list of countries and economies is not exhaustive.

b Special Administrative Region of China.

There is evidence that the stimulus has been successful in the sense that, in general, the greater the stimulus received, the greater was a given country's economic growth (US Council of Economic Advisers, 2010). Nevertheless, alongside this positive effect of the stimulus, the stimulus created fiscal difficulties for governments, leading to calls for the stimulus to be withdrawn or diminished in size. This would, however, be a serious mistake as a premature withdrawal of the stimulus when the world economy has not yet achieved reasonable economic growth (let alone reverted to its long-term growth rate) may push economies further into recession or even into full-scale depression if there are negative effects on expectations. It is therefore all the more important that the cooperation achieved so far in the G20 arrangement should continue so that there is a coordinated and well organized withdrawal of the fiscal stimulus at the appropriate time. The US experience between 1937 and 1940 (Romer, 2009) and that of Japan more recently should be a warning to present-day policymakers in this respect.

The third positive factor that has also helped improve the performance of world economy in relation to the present crisis can be described as an issue of governance. It so happened that economic leadership in the US in this period of crisis was held by an intellectually and politically close group of economists. These were conventional US Keynesian economists who defined the essential problem facing the world economy as being that of a shortage of aggregate demand. Unlike the Chicago economists, they also believed that government induced stimuli could correct the demand deficits and thereby help the real economy. The cohesive economic outlook of this team of economic advisors helped ensure clarity and purpose in the stimulus programme and its implementation.

Not only were these economists well versed in economic theory, but also, if not more importantly, some of them, including Ben Bernanke (Chairman of the Federal Reserve) and Christina Romer (Chair, US Council of Economic Advisers), were serious students of the history of the Great Depression and were determined not to repeat the serious policy mistakes made during that period.

To sum up, three factors -- namely continuing fast growth in India, China and other developing countries, unprecedented cooperation between countries symbolized by the G20, and the creation and governance by like-minded people of a corrective economic policy programme -- have been positive differences in the recent evolution of the world economy. Hopefully, these factors will continue to operate in this direction, even if certain other developments present obstacles to widespread resumption of reasonable growth rates.

5. Financial Globalization and the Real Economy

The financial system and the conduct of monetary policy prior to the eruption of the financial crisis and onset of economic recession in 2008 have received thoroughly deserved criticism for allowing the development of the subprime mortgage bubble, the stock-market bubble and asset prices bubbles and not puncturing these in time or minimizing the damage. There were, however, some evident benefits, albeit unintended, of this regime for the real economy and which have not been adequately recognized (see below). Without a more balanced picture of the merits and demerits of the pre-crisis financial system and policies, future policy decisions may not be the most appropriate.

Table 4 provides broad-brush data for selected countries and for the real economy during the last two decades. What is clear is that the world economy performed exceptionally well in real terms during the present decade, achieving arguably the highest growth rate ever. Further, between 2000-2007, developing countries grew at almost twice the rate of developed countries. This helped to marginally reduce the disparity between the rich and poor countries. Among developing countries India and China – the two most populous countries where the bulk of the population hitherto lived in absolute poverty – had stellar performances, experiencing historically unprecedented growth that has resulted in substantial poverty reduction.⁷

Among the developed countries, the United States has been the leader in terms of real economic growth. Evidence suggests that in the period 1995-2005 it achieved a one percentage point increase in its long-term trend rate of growth of productivity (Jorgenson and Vu, 2005). Illustrative supporting data on this point are provided in Table 5. This is an impressive achievement bearing in mind that this is not a ‘catch-up economy’ but one operating at the frontiers of knowledge. Such a productivity increase implies a high degree of technical progress as well as concomitant organizational changes. This achievement would be considered even greater if the benefits of national productivity growth had been spread more widely.

Evidence suggests that the US, India, China and a clutch of other countries -- the pre-crisis top performers in terms of growth rates -- were overall beneficiaries of international economic integration and financial globalization. In the case of India and China, this was partly due to the fact that they managed their integration into the global economy, in particular to avoid the harmful effects of unfettered capital flows. They also pursued a policy of ‘strategic integration’ in relation to trade and long-term investment (Singh, forthcoming).

Financial globalization enabled China to purchase US treasury bills, thereby helping the US to finance its current account deficit and keep US interest rates low. In addition, globalization has helped the US to keep domestic inflation in check, not least through imports of cheap consumer and intermediate products from China. (For a fuller discussion of the economic interactions between the US and the Chinese economy, see Singh, 2008.)

Most students of the financial system would agree that its central purpose is to allocate society's savings and investment resources to those households, corporations and jurisdictions that can use them most effectively. It could be argued that the pre-crisis financial system and monetary policies were performing that function, as is evidenced by very fast growth across the world economy during the period 2000-2007. However, the implosion resulting from dubious policies and unregulated practices highlight inherent flaws in this system. These rendered it unsustainable. The best that can be said about the pre-crisis financial regime is that it demonstrated that the world economy had a growth potential of at least 5 per cent a year on the supply side.

The purpose of any reform of the financial system should be to allow the world economy to grow at its full potential in a sustainable manner. It would be a travesty of justice from the perspective of the world's poor if any reformed financial system fell short of the maximum sustainable growth objective.

To sum up, it could be argued that the developing world under the recent global regime has taken a giant step forward; a reformed financial system must build on and promote this progress.

Table 4: Growth of World Output and that of Selected Countries and Regions 1991-2007 (% per annum)

Countries	1991-2001	2001-2007	2002	2003	2004	2005	2006	2007
World	3.1	3.3	1.9	2.7	4.0	3.4	3.9	3.8
Japan	1.1	1.8	0.3	1.4	2.7	1.9	2.4	2.1
US	3.5	2.7	1.6	2.5	3.6	3.1	2.9	2.2
European Union	2.4	2.1	1.2	1.3	2.5	1.8	3.0	2.9
Germany	1.8	1.2	0.0	-0.2	1.2	0.9	2.9	2.5
United Kingdom	2.8	2.6	2.1	2.7	3.3	1.9	2.8	3.0
Russian Federation	--	6.7	4.7	7.3	7.1	6.4	6.7	8.1
Africa	2.9	5.2	3.7	4.9	5.4	5.7	5.6	5.8
Latin American and the Caribbean	3.1	4.0	-0.5	2.2	6.2	4.9	5.6	5.7
East Asia	7.8	8.1	7.4	7.1	8.3	8.0	8.8	9.1
China	10.3	10.4	9.1	10.0	10.1	10.4	11.1	11.4
India	5.9	8.0	3.6	8.3	8.5	8.8	9.2	9.7

Source: UNCTAD secretariat calculations, based on UNCTAD HANDBOOK of STATISTICS; and United Nations, Department of Economic and Social Affairs (UNDESA), LINK Global Economic Outlook 2008 (May 2008).

Table 5: Explaining the Productivity Surge in the US

Average Annual Growth	1973-95	1995-03	Difference
Labour Productivity	1.49	3.06	1.57
O/w Capital Deepening	0.89	1.75	0.86
Labour Quality	0.26	0.17	-0.09
Total Factor Productivity	0.34	1.14	0.80

Source: Jorgenson, Ho and Stiroh, 2007.

6. Economic Theory and the Current Crisis

Economists' analyses relating to one particular crisis are not necessarily relevant to another. The analytical lessons derived from the Latin American debt crisis of the 1980s do not explain the following crisis that erupted in Asia in the 1990s. Similarly, the lessons of the Asian crisis of the 1990s do not seem to be applicable to the current financial crisis.

The 1980s debt crisis had a devastating impact on Latin America. It is widely agreed that for the continent as a whole it was a 'lost decade' characterized by little or no growth and a fall in per capita income of more than 15 per cent over the decade. In contrast, per capita income in East Asian countries grew by more than 50 per cent during this period. There is sharp contention between orthodox and heterodox economists regarding the reasons for the enormous differences in the performance of these two regions. Orthodox economists argue that the Latin America debt crisis was caused by domestic factors, namely micro-economic inefficiencies, macro-economic policy errors, and unwise borrowing and spending. In contrast heterodox economists believe that the Latin American debt crisis was due to external factors over which these countries had no control. In particular, they emphasize the changes in US monetary policy in the late 1970s that resulted in an increase in the real world interest rate from 0.5 per cent in the mid 1970s to 7 per cent in the early 1980s, a fourteen-fold increase (the so called 'Volcker shock'). The impact on the highly-indebted Latin American economies was devastating.

Heterodox economists argue that the restrictive changes in US monetary policy had a greater impact on Latin America than Asia. This was partly due to Latin America's higher initial level of debt and its structure. In addition, Latin America was more affected by adverse changes in the terms-of-trade than was Asia.⁸ Further, as Fishlow (1991) points out, Latin America countries, unlike Asian countries, were subject to capital supply shocks due to contagion. Taken together, as they should be, these shocks were far greater for Latin America than for Asia. Hence Latin America countries became more heavily balance-of-payments constrained and for a much longer period than did the Asian countries. This explains their relatively poor economic performance in the 'lost decade' (Singh, 1993). Thus it is argued that the budget and current account deficits in Latin America were both the cause and consequence of their debt crisis.

The 1997-2000 Asian crisis was of a rather different kind than that in Latin America. By and large, governments in Asia have had a record of managing their macro-economic policies well. It was the private sector's excessive

borrowing in foreign currency and the consequent mismatch between expected inflows and outflows that led to the Asian crisis. It could be said to have been a case of government virtue and private sector profligacy. However, leading US officials, including Alan Greenspan, Larry Summers, and the IMF itself, later put forward a more ideological explanation for the Asian crisis. They argued that, although some micro- or macro -economic disequilibria (such as the Bangkok property boom) may have been the trigger for the crisis, the root cause was nothing less than the entire 'Asian way of doing business'. This was characterized by close relationships between government, business and finance in the day-to-day micro-economic behaviour of economic agents, namely by 'crony capitalism'. This is alleged to have resulted in serious distortions in the economy and in economic management, leading ultimately to the crisis. (See Glen and Singh (2005) for a fuller discussion of these issues.)

This version of events is highly disputed by heterodox economists. They argue that the root cause of the crisis was the introduction of financial liberalization before prudential regulation had been instituted. They point out that other countries, including China and India, which did not fully liberalize their financial sector, escaped the crisis, whereas countries that did (Indonesia, Korea, Thailand) were badly affected. In sum, it is suggested here that the Asian crisis was due to financial liberalization in the absence of prudential regulation rather than to 'too much government'.

The essential point, however, is to emphasize that each economic and financial crisis is of a rather different nature. One hallmark of the present crisis has been the credit crunch, whereby banks stopped lending to other banks and businesses, thereby disrupting the system of credit that oils the workings of a modern economy. In response, governments resorted to bailing out banks and other financial institutions that were deemed too big to be allowed to fail, in the sense that their failure would have enormous external diseconomies for other firms and institutions.

Thus, analyses of major financial crises during the past four decades are not directly applicable to the current crisis. Each crisis has been different from the one before. Every major crisis therefore needs to be examined in its own right with a fresh eye, before any firm analytical and policy conclusions can be drawn from that experience.

In addition to analyzing crisis episodes it is also essential to examine the role of macroeconomic theory as currently taught in universities and used by policy-makers in central banks in explaining and tackling the present crisis. Neither university macro-economists nor the best central bank practitioners foresaw the

eruption of the 2008 financial crisis. Rival schools of thought in the currently dominant macroeconomic theory (US Keynesian and the Chicago classical school) have recently found common ground on key aspects of macro-economic theory. Both sides have accepted the 'rational expectations' basis of the micro-economic theory underlying the macro construction. In sum, it is assumed that households maximize utility, firms maximize profits and economic agents make decisions on the basis of rational expectations. These ideas lead to sophisticated dynamic stochastic general equilibrium models (DSGE), which are so complex that they cannot be solved analytically, but require numerical methods and considerable computer power for their solution. Nevertheless, such models were singularly unhelpful in predicting the current crisis. It is convincingly argued by Ormerod (2010) that these models are based on risk calculations but did not take into account uncertainty. (Risk is predictable in the sense that the probability distribution of future outcomes can be estimated. This is not so at all for uncertainty.) Ormerod (2010) observes: 'in the brave new world of DSGE, the possibility of a systemic collapse, of a cascade of defaults across the system, was never considered.'

Nevertheless, in the event, when it came to devising the policy response, key policy-makers gained greater wisdom from basic Keynesian economic theory and from economic history than from modern macroeconomics. US economic advisors and policy-makers drew on the former and defined the essential problem of the crisis in terms of a shortage of world aggregate demand, and they referred to the economic history of the Great Depression to avoid the policy mistakes of that period. This explains the priority given to saving the financial system through unprecedented bail-outs. It is commonly believed that the failure of several thousand banks in the US in the 1930s contributed to the prolongation of the Great Depression. Similarly, the success of the giant economic stimulus programmes associated with the New Deal suggested that similar measures should be used once again to avert a worsening recession.

Lessons also need to be drawn from more recent history, namely that of Japan, whose average annual growth rate for the first decade of the 2000s fell to a mere 1 per cent. The reasons for this economy's prolonged and abysmal performance need to be studied and understood. Japan has evidently been faced with enormous under-consumption problems in response to which neither the government's monetary or fiscal policies have met with success. Greater research efforts devoted to Japan's economic dilemma are likely to be as, if not more, rewarding for the economies of developed countries than further development of DSGE models.

7. Conclusion: The Way Forward

The ongoing policy collaboration between countries - symbolized by the G20 - provides one of the chief grounds for optimism in relation to the present crisis and for the future. Nevertheless as noted before, there are well-founded criticisms regarding the legitimacy of the exclusive G20 group itself. Moreover, many G20 members are disappointed with the process due to the fact that G7 members (the rich countries) are yet to make meaningful concessions regarding reform of the IMF articles of agreement, including the weighting of voting power (Chin (2010) and Helleiner and Kirshner (2009)). Nevertheless, the G20 process remains a promising start to more meaningful international economic cooperation.

It has been argued that agreement among the G20 has been entirely due to the adverse circumstances in which most countries found themselves and that, once the world economy recovers, collective action will cease. However, on a priori grounds, an equally if not more plausible scenario is that the apparent success of collective action will encourage nation states to take further coordinated action to resolve their difficulties. Indeed, it can be argued that the international consensual approach outlined above is imperative if the imbalances in the global economy that many economists believe were a principal long-term cause of the crisis are to be resolved.

A stronger reason for optimism is the continuing fast growth (albeit a little lower than pre-crisis) in India, China and other developing countries and their contribution to the growth of world demand and reduction of world poverty.

Although the world economy's growth path for the period 2000-2007 was ultimately unsustainable, due in part to the rising US current account deficit and in part to the weaknesses of the financial system, this growth certainly took the global economy a long way forward in various respects, as outlined earlier. The important issue now is which factors will determine the outcome for the real world economy in the next decade or two after the crisis? Will there be a new growth path and will it be more or less satisfactory than the previous one, both from an economic and social point of view? What is required is a growth path that allows the world economy to operate at its full sustainable potential, while reducing the risks of renewed global financial fragility and crisis. The central message of this contribution is that, for this to be possible, increasing global co-operation is necessary in trade and investment and in the related fields of food, environment and energy. Equally importantly, a more equal distribution of income, wealth and social protection, as well as returns to capital and labour, are desirable, not only for their own sake but also to resolve the incipient world

under-consumption problem before this becomes a serious obstacle to fast economic growth.

It is, however, legitimate to ask whether the above is likely to happen. The analysis in this paper and currently available information point to three broad possible outcomes. The first and most optimistic is one in which the worst is over and the global financial system has been thoroughly reformed in a manner that ensures its stability and enhances its contribution to more equitable global development. At the time of writing, the latest information about the economy suggests that the most affected countries are recovering quite satisfactorily. The chief economist of the IMF recently reported (Blanchard, 2010) that the global economy has been recovering better than expected and global growth is expected to reach a rate of 4.2 per cent in 2010 (an upwards revision compared with the IMF forecasts at the beginning of that year (IMF, 2010a, 2010b) and to reach 4.3 per cent in 2011. Global trade and capital flows have been recovering very fast. Even unemployment, which is normally a lagging indicator, has at long last begun to decline, at least in the US (Chandra, 2010). These recent short-term improvements can be interpreted as suggesting that the evolution of the world economy is pointing in a positive direction. However, Blanchard (2010: 2) warns that these ‘good numbers hide a more complex reality, namely a tepid recovery in many advanced economies, and a much stronger one in most emerging and developing economies.’ This statement suggests an uncertain outcome for the world economy.

One of the biggest global worries concerns the current European sovereign debt situation that has major implications for the world economy. One cannot dismiss the possibility of a cascading financial crisis due initially to contagion in the Euro area (starting with a default in Greece and potentially in Portugal, Spain and Italy, and even elsewhere in Europe) and resulting in a speculative attack on the Euro currency. The likelihood of such a turn of events may have a small probability, but in view of our limited capacity to predict the future it would be unwise to rule out a major crisis, particularly bearing in mind very recent experience. To avert such an economic, social and political catastrophe, coordinated consultation and action by nations and European and global institutions are required to tame the financial markets.

In any conflict of interest between states and the financial markets, clearly the interests of the former should and can prevail. In view of the dimensions of the European sovereign debt problem, and to avert a run on the currency, a rescue package of three quarters of a trillion euros has already been put in place. If in the worst-case scenario this should prove inadequate, and European nations consider the European Union and the common currency to be vital for European

peace and development, they could in principle act in concert and challenge the markets by introducing an even bigger financial package, thereby stopping speculators in their tracks.⁹ In this context it should be noted that the €750 billion bail out is worth 6 per cent of the GDP of the European Union. Putting this in a historical context, it may be recalled that just over 60 years ago the US administration, faced with what they perceived as a communist threat to Western Europe, intervened with the Marshall Plan. The value of this plan over a three-year period amounted to 4 per cent of US GDP (Glyn et al. 1991).¹⁰ EU countries have clearly demonstrated their resolve to overcome the markets in order to save the Union.

To sum up, the challenge presented by the current crisis to policymakers around the world is first and foremost to avoid long-term stagnation resulting from injudicious policies. This would suggest, *inter alia*, resisting a premature drawing down of government debt in rich countries. The associated reduction in state expenditure and increases in taxation are likely to prolong the recession and unemployment, with consequent ripple effects that could result in continued long-term stagnation throughout the global economy. In addition to avoiding stagnation, concerted action is required to introduce national and international supervision and regulation of financial markets. Further measures are also needed to achieve a rebalancing of the global economy such that it reaches its full supply side potential, while also achieving an improvement in inter-country distribution of growth and development. In short, markets should serve the people rather than determining their socio-economic destiny.¹¹

Notes

¹ These numbers illustrate the orders of magnitude involved in the stock market contagion at that time. In fact in the first six months share prices fell and then rose over the next six months.

² Another related manifestation of global imbalances before the crisis was the huge and growing foreign currency reserves of the Chinese Central Bank. In the second quarter of 2010 the total value of these reserves was estimated to be around 2.4 trillion US dollars (Chin, 2010).

³ There is a 'blame-game' with respect to who bears responsibility for the current large imbalances -- the profligate US consumer causing the country's current account deficit, or the Asian peoples' high propensity to save, resulting in current account surpluses. Such a construction of events can be interpreted negatively as suggesting that the US attracts savings from the world's poorer nations thereby depriving the latter of much-needed capital. However, Larry Summers (2005) suggested that such arguments are based on presumptions that do not tally with the broader facts. Specifically, he observed that during the last decade the world has been awash with savings and liquidity. Had the US been extracting savings from the rest of the world at the expense of investment elsewhere, the likely result would have been rising global real interest rates rather than the low rates actually experienced.

⁴ The only OECD country to reach the unemployment level experienced by the US in the 1930s is Spain, with a current unemployment rate of 19 per cent (Economist, Economic and Financial Indicators, May 1, 2010).

⁵ However, it can be argued that the G20 is far from an ideal vehicle for international cooperation as it excludes more than 150 countries. Nevertheless, some argue that a group bigger than the G20 may not be a practical device for agreeing and implementing decisive measures to cope with the crisis.

⁶ The source of these figures is UNDESA (2010 table 4 page 12)

⁷ There is scholarly dispute over the Indian figures for poverty reduction. However, the Indian government's view and that of many scholars is that gains in poverty reduction from fast growth have been significant. See further Planning Commission of India (2009).

⁸ For a detailed analysis of the debt crisis of the 1980s see Singh 1993; Ross 1991; Fishlow 1990; Hughes and Singh 1991.

⁹ The effectiveness of this measure was demonstrated by the Hong-Kong Central Bank's punitive action against speculators during the 1997-1999 Asian crisis.

¹⁰ An even more pessimistic scenario would, as noted above, involve contagion beyond Europe and wider sovereign debt default. In the absence of coordinated policies and action, such a development would result in widespread financial chaos, economic disruption, unemployment and lower standards of living for many people worldwide.

¹¹ It will be argued by some that reduced long-term economic growth may be positive by effecting a reduction in global warming and conserving natural resources. However, important issues such as climate change and redistribution of income are beyond the scope of this short paper.

References

- Aiginger, K. 2009. 'The Current Economic Crisis: Causes, Cures and Consequences', *WIFO Working Papers No. 431*, August, Österreichisches Institut für Wirtschaftschung.
- Akyuz, Y. 2010. 'Global Economic Prospects: The Recession May Be Over But Where Next?' *Research Papers 26*, South Centre, Geneva.
- Andrews, Edmund L. 2008. 'Greenspan Concedes Error on Regulation', *New York Times*, October 23.
- Blanchard, Oliver. 2010. 'World Faces Serious New Economic Challenges.' *IMF Blog*, posted on April 21, 2010 by IMF direct. <http://blog-imfdirect.imf.org/> referenced 17 May 2010.
- Chandra, Shobhana. 2010. 'Productivity in U.S. Rises More Than Forecast, Labor Costs Drop.' Bloomberg.com, May 13.
http://.bloomberg.com/apps/news?pid=email_en&sid=an2SOt
- Chin, Gregory T. 2010. 'Remaking the architecture: the emerging powers, self-insuring and regional insulation.' *International Affairs*, vol. 86, No. 3:693-715.
- Cooper, R. 2005. *Living with Global Imbalances: A Contrarian View*. Policy Brief, Institute for International Economics, November, Washington D.C.
- Economist, *Economic and Financial Indicators*, May 1, 2010
- Eichengreen, B. and K. H. O'Rourke. 2008. *A Tale of Two Depressions*, <http://www.voxeu.org/>, April 6
- Fishlow, Albert. 1991. 'Some reflections on comparative Latin American economic performance and policy'. In Tariq Banuri (ed.) *Economic Liberalization: No Panacea*, Oxford University Press, Oxford.

Galbraith, James. 2010. 'In Defense of Deficits'. *The Nation*, March 4 2010

Glyn, Andrew, Alan Hughes, Alain Lipietz and Ajit Singh. 1991. 'The Rise and Fall of the Golden Age' In Stephen A. Marglin and Juliet B. Shaw, *The Golden Age of Capitalism*, Clarendon Press, Oxford.

Glen J. and Ajit Singh. 2005. 'Corporate Governance and Finance> Re-thinking Lessons from the Asian Crisis', First published as *Cambridge University Business School Working Paper 288*, June. 2004. Subsequently published in the *Eastern Economic Journal*, Vol. 31, No. 2, Spring, pp.219-242.

Greenspan, Alan. 2005. 'Consumer Finance.' *Speech given at the Federal Reserve System's Fourth Annual Community Affairs Research Conference*, April 8, Federal Reserve Board, Washington, D.C.

Greenspan, Alan. 2010. Evidence given to the U.S. Congress Financial Crisis Inquiry Committee (established to investigate the sub-prime mortgage crisis), U.S. Government, Washington D.C.

Helleiner, Eric and Jonathan Kirshner (eds.). 2009. *The Future of the Dollar*. Cornell University Press, Ithaca, NY.

IMF (International Monetary Fund). 2008a. *World Economic Outlook. Housing and the Business Cycle*. February. IMF, Washington D.C.

----- IMF 2008b. *World Economic Outlook - Financial Stress, Downturns and Recovery*. October 2008. IMF Washington D.C.

----- IMF. 2009a. *World Economic Outlook Update. Contractionary Forces Receding But Weak Recovery Ahead*. July 8. IMF, Washington D.C.

----- IMF. 2009b. *World Economic Outlook – Crisis and Recovery*, April. IMF, Washington D.C.

-----, 2009c. *World Economic Outlook. Sustaining the Recovery*. October 15. IMF, Washington D.C.

-----, 2010a. *World Economic Outlook. A policy-Driven, Multispeed Recovery*. January 26. IMF, Washington D.C.

-----, 2010b. *World Economic Outlook, Rebalancing Growth*. April 21. IMF, Washington D.C.

Jorgenson, Dale and K. Vu. 2005. 'Information technology and the world growth resurgence.' *German Economic Review*, No. 8 (2), pp.122-145.

Jorgenson Dale W. S. Mun and Kevin J. Ho. 2007. 'A retrospective look at the U.S. productivity growth resurgence,' *Staff Reports 277*, Federal Reserve, <http://www.ideas.repec.org/e/pst41.html>

Krugman, P. (2008) 'The Big Meltdown', *New York Times*, March 2

Krugman, P. 2009a. 'How did Economists Get it so Wrong?' *New York Times*, Sept 2.

Krugman, P. 2009b. 'Revitalizing Economics after the Crash', *New York Times*, Sept 11.

Krugman, P. 2010. 'Goldman Sachs, salaried looters', *The Indian Express, Chandigarh*, April 24.

Llewellyn, John. 2008. 'The Shock of the New', *Prospect*, November. London.

Ormerod, Paul. 2010. 'The Current Crisis and the Culpability of Macroeconomic Theory', *21st Century Society, Journal of the Academy of Social Sciences*, Vol. 5, No. 1, 5-18.

Planning Commission, Government of India. 2009. *The Tendulkar Commission Report on Poverty Estimates*. Planning Commission, New Delhi.

Romer, Christina. 2009. *Back from the Brink*. Address given on September 24 at the Federal Reserve Bank of Chicago, Chicago, Illinois.

Singh, Ajit. 1993. 'Asian Economic Success and Latin American Failure in the 1980s: New Analyses and Future Policy Implications', *International Review of Applied Economics*, Vol. 7, No. 3, 1993: 267-289.

Singh, Ajit. 2007. 'Globalisation, Industrial Revolutions in India and China and Labour Markets in Advanced Countries: Implications for National and International Economic Policy', *Working Paper 81, International Labour Office*, Geneva.

Singh, Ajit. (forthcoming) 'Globalization, Openness and Economic Nationalism'. Cambridge University Centre for Business Research, *Working Paper* series. CBR, Cambridge.

Solow, R. 2009. 'How to Understand the Disaster', *The New York Review of Books*, May 14.

Summers, Lawrence H. 2006. 'Reflections on Global Account Imbalances and Emerging Markets Reserve Accumulation.' *L. K. Jha Memorial Lecture*, Reserve Bank of India, Mumbai, India.

UNCTAD (United Nations Conference on Trade and Development). 2008. *Trade and Development Report*, United Nations, Geneva.

----- .2009. *Trade and Development Report*, United Nations, Geneva.

----- . 2010. *Trade and Development Report*, United Nations, Geneva.

UNCTAD. (Various Years) *Handbook of Statistics*, United Nations Geneva.

UNDESA (United Nations Department of Economic and Social Affairs). 2008. *Global Economic Outlook*, May. United Nations, New York.

----- . 2009. Global Economic Outlook, May. United Nations, New York.

----- . 2010. Global Economic Outlook, May. United Nations, New York.

US Council of Economic Advisers. 2010. *Annual Report of the Council of Economic Advisers*. US Government Printing Office, Washington D.C.

Wolf, Martin. 2008. 'The world wakes from the wish-dream of decoupling', *Financial Times*, October 22.